

IN THE CLAIMS

1. (Amended) A structure comprising:

a polycrystalline material comprising crystallites of polymers with interstitial regions therebetween;

polymers are selected from the group consisting of a precursor to an electrically conductive polymer and an electrically conductive polymer;

said interstitial regions between said crystallites comprising amorphous material comprising an additive;

said additive provides mobility to said polymer to allow said polymer to associate with one another to achieve said crystallites[.];

said polycrystalline material is characterized by a degree of crystallinity and a degree of amorphous regions, said degree of polycrystallinity and said degree of amorphous regions are selected by selecting the composition of said additive and the amount of said additive.

3. (Amended) A structure according to claim 1, wherein said additive is [selected from the group consisting of plasticizers and diluents] a plasticizer.

7. (Amended) A structure comprising :

a polycrystalline material comprising crystallites of polymers with interstitial regions therebetween;

said polymer is selected from the group consisting of a precursors to an electrically conductive polymer and an electrically conductive polymer;

said interstitial regions comprise an amorphous material selected from the group consisting of said polymers;

said amorphous material includes an additive[.];

B4 cont'd
said polycrystalline material is characterized by a degree of crystallinity and a degree of amorphous regions, said degree of polycrystallinity and said degree of amorphous regions are selected by selecting the composition of said additive and the amount of said additive.

10. (Amended) A structure according to claim 7, wherein said [plasticizer] additive is selected from the group consisting of:

Adipic acid derivatives	Sebacic acid derivatives
Azelaic acid derivatives	Stearic acid derivatives
Benzoic acid derivatives	Succinic acid derivatives
Citric acid derivatives	Sulfonic acid derivative
Dimer acid derivatives	Terpentines
Epoxy derivatives	Terpentine derivatives
Fumaric acid derivatives	Siloxanes
Glycerol derivatives	Polysiloxanes
Isobutyrate derivatives	Ethylene glycols
Isophthalic acid derivatives	Polyethylene glycols
Lauric acid derivatives	Polyesters
Linoleic acid derivative	Sucrose derivatives
Maleic acid derivative	Tartaric acid derivative
Mellitates	Terephthalic acid derivative
Myristic acid derivatives	Trimellitic acid derivatives

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Oleic acid derivatives
Palmitic acid derivatives
Paraffin derivatives
Phosphoric acid derivatives
Phthalic acid derivatives
Ricinoleic acid derivatives

Glycol derivatives
Glycolates
Hydrocarbons
Phosphonic acid derivatives
Polysilanes

18. (Amended) A structure comprising:

a polycrystalline material comprising crystallites of polyaniline with interstitial regions therebetween;

said polyaniline is selected from the group consisting of a precursor to an electrically conductive polyaniline and an electrically conductive polyaniline;

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said interstitial regions comprise an amorphous material selected from the group consisting of polyaniline;

said amorphous material includes an additive in an amount from about 0.001% to about 90% by weight;

said additive is selected from the group consisting of poly-co-dimethylaminopropyl siloxane, poly (ethylene glycol) tetrahydrofurfuryl ether, glycerol triacetate and epoxidized soy bean oil[.];

said polycrystalline material is characterized by a degree of crystallinity and a degree of amorphous regions, said degree of polycrystallinity and said degree of amorphous regions are selected by selecting the composition of said additive and the amount of said additive.